Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A heat exchanger~~, in particular a flat pipe evaporator~~ for a motor vehicle air conditioning system, comprising at least one collecting tank made of sheet metal, which is divided in the longitudinal direction into at least two chambers, and the ends of pipes~~, in particular flat pipes,~~ are introduced in ~~the~~ a base thereof, which collecting tank exhibits a tunnel-shaped collecting tank part, an essentially flat collecting tank part, which forms the base, and covers which are ~~arranged~~ removably mounted in each case on ~~the~~ a front side, wherein at least one ~~cover~~ of the covers is embodied in a flat manner, at least in the area of its outer edge, and is positioned in the collecting tank with a positive fit.

2. (Currently amended) The heat exchanger as claimed in claim 1, wherein the ~~cover~~ at least one of the covers is introduced from the front side and on ~~the~~ a collecting tank side lies against a number of stops that are formed on the tunnel-shaped part of the collecting tank and/or on the flat part of the collecting tank.

3. (Currently amended) The heat exchanger as claimed in claim 1, wherein the at least one of the covers ~~cover~~ is ~~preferably~~ secured by means of a number of bent brackets.

4. (Previously presented) The heat exchanger as claimed in claim 3, wherein the brackets are part of the tunnel-shaped part of the collecting tank and/or the flat part of the collecting tank.

5. (Currently amended) The heat exchanger as claimed in claim 1, wherein the at least one of the covers ~~cover~~ exhibits an opening for the supply or return of ~~the~~ a cooling medium, the edge of which is bent outwards ~~in particular~~.

6. (Previously presented) The heat exchanger as claimed in claim 5, wherein the opening is executed as a raised rim passage.

Claim 7 (Cancelled).

8. (Currently amended) The heat exchanger as claimed in claim 5, wherein a suction pipe, which is attached to the at least one of the covers ~~cover~~ with an opening, exhibits an internal diameter that corresponds ~~more or less~~ to the external diameter of the edge circumscribing the opening.

9. (Currently amended) The heat exchanger as claimed in claim 5, wherein an injection pipe, which is attached to ~~a cover~~ another one of the at least one of the covers with an opening, exhibits an external diameter that corresponds ~~more or less~~ to the smallest internal diameter of the edge circumscribing the opening.

10. (Currently amended) The heat exchanger as claimed in claim 1, wherein the edge of ~~the~~ a collecting tank metal sheet for the cover exhibits an insertion taper.

11. (Currently amended) The heat exchanger as claimed in claim 1, wherein the at least two ~~tunnel shaped parts~~ chambers of the collecting tank exhibit an essentially semicircular form.

12. (Previously presented) The heat exchanger as claimed in claim 1, wherein separating walls in the heat exchanger are arranged in such a way that the flow through the heat exchanger is four-fold or greater.

13. (Currently amended) The heat exchanger ~~in particular~~ as claimed in claim 1, with flat pipes and corrugated ribs, with at least one collecting tank, into the base of which the ends of the flat pipes are introduced, in conjunction with which the corrugated ribs exhibit a rib height which corresponds in each case to the distance between two flat pipes, and in conjunction with which two rib sections connected in each case via a rib arc are inclined towards each other at an opening angle α wherein the corrugated rib exhibits a height of 3 to 6 mm~~, and preferably 4 to 5 mm,~~ and a rib density of 50 to 90 ribs~~, and preferably 60 to 80 ribs, and in particular preferably 70 ribs~~ per 100 mm.

14. (Currently Amended) The heat exchanger as claimed in claim 1, wherein the opening angle of at least two rib sections~~, and preferably a large number or all of the rib~~

~~sections,~~ amounts to 22°+/-7° or 30°+/-10°.

15. (Currently amended) The heat exchanger as claimed in claim 1, wherein one or more rib arcs exhibit, at least in some areas, a radius of curvature smaller than 0.4 mm~~, preferably smaller than or equal to 0.35 mm, and in particular preferably smaller than or equal to 0.3 mm~~.

16. (Previously presented) The heat exchanger as claimed in claim 1 wherein the flat pipes exhibit a width in the order of 1.5 to 3 mm.

17. (Currently amended) A motor vehicle air conditioning system~~, characterized~~ ~~by~~ including an evaporator as claimed in claim 1.

18. (New) A heat exchanger for a motor vehicle air conditioning system comprising:

at least one collecting tank comprising a metal sheet having a generally flat central portion and first and second side portions folded over the central portion to form first and second generally tubular chambers, the first tubular chamber having a centerline parallel to a centerline of the second tubular chamber, the generally flat central portion including a plurality of openings configured to receive ends of flat pipes; and

first and second covers removably mounted in first open ends of the first and second chambers, the first and second covers each including a peripheral portion lying

substantially in a plane, the first and second covers being mounted in the first open ends of the first and second chambers such that the peripheral portion plane is substantially perpendicular to the first centerline.

19. (New) The heat exchanger as claimed in claim 18 including at least one stop projecting into the first tubular chamber near the first open end of the first tubular chamber for limiting movement of the first cover into the first tubular chamber and wherein the first tubular chamber includes at least one flexible tab bendable from a first position allowing said first cover to move away from the at least one stop and a second position overlying said peripheral portion for substantially preventing said first cover from moving away from said at least one stop.

20. (New) The heat exchanger of claim 19 wherein said first cover includes a hollow cylinder projecting away from the peripheral portion and having a centerline substantially perpendicular to the plane.